



# LEADING BY EXAMPLE

WE'RE NOT JUST STEWARDS OF THE ENVIRONMENT –  
WE'RE GLOBAL LEADERS OF THE MOVEMENT

Iowa General Assembly  
Energy Efficiency Study Committee

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## ***Whirlpool Corporation Overview***

- ⌘ Largest global manufacturer and marketer of major home appliances
- ⌘ Annual sales of more than **\$18 billion**
- ⌘ **73,000** employees
- ⌘ Over **70** manufacturing and technology research centers around the globe
- ⌘ Markets Whirlpool, KitchenAid, Maytag, Jenn-Air, Amana, Brastemp, Bauknecht, Consul and other major brands to consumers in more than **170 countries**
- ⌘ Additional information at **[www.whirlpoolcorp.com](http://www.whirlpoolcorp.com)**



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## ***Our Commitment to Energy and Water Efficiency***

Whirlpool is the only appliance company that brings this **"across the board" focus** to energy & water.

We continually strive for improvements while always keeping in mind that **exceeding the expectations** of the consumer is our goal.

It is not just another criterion to us, it is **a way of life.**

**Efficiency just makes good business sense.**





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# Whirlpool is Energy and Water Efficient Across the Value Chain

## Manufacturing



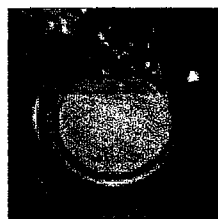
- No volatile organic compound (VOC) paints
  - No emissions of solvents
- Lessened power plant emissions
  - Low energy lighting
  - High-efficiency equipment

## Product Distribution

- SmartWay® Transportation Partner
  - Carriers use more efficient trucks
  - Less truck idle time
- Electric Lift Trucks
  - Fewer net emissions



## Design



- Usability
- Energy reductions in every product
- Water reductions (clothes washers, dishwashers)



## End of Life Management

- 85 – 90% of materials are recycled (steel, other metals, some plastics)
- Disposal of ozone depleting refrigerants
- Styrofoam Reuse
  - Was previously sent to landfills
  - Now ground up (80:1 size reduction)
  - Ground material is reused in plastic furniture, food containers, playground equipment and many other products consumers use daily





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## ***Reducing Greenhouse Emissions***

⌘ In 2003, Whirlpool became the first appliance manufacturer to announce a global greenhouse gas reduction target.

⌘ 3% reduction in overall global emissions from 1998 levels by 2008

- Target includes emissions from manufacturing, transportation and lifetime emissions of Whirlpool-manufactured products

★ ⌘ On track to meet 2008 goal, despite a 40% increase in sales

⌘ If our goal is met, the carbon that will NOT be emitted into the air is equivalent to a train of coal cars 13,000 miles long.

Whirlpool is a member of the Pew Center's  
Business Environment Leadership Council –  
A group of businesses committed to efficient  
and effective solutions to the climate problem.





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# ***Why Energy Efficiency?***

## **⌘ CHEAPER**

- Each \$1 invested in Energy Star program = \$75 in energy cost savings and \$15 of investment in new efficiency technologies

## **⌘ QUICKER**

- In 2001, California cut peak electricity use by 10% in less than a year

## **⌘ CLEANER**

- "Negawatt" produces NO ENVIRONMENTAL FOOTPRINT

## **⌘ ENHANCES SECURITY**

- Energy efficiency is a "homegrown" resource!

Source: Alliance to Save Energy

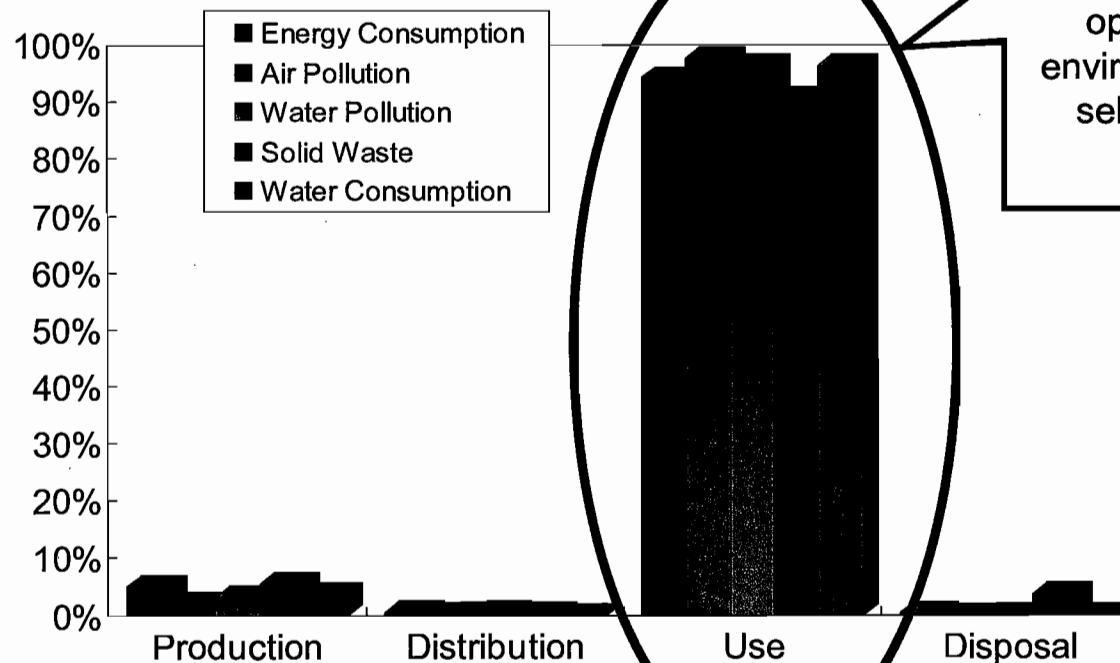


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## Importance of Efficiency in Life Cycle

### Cradle-to-grave Assessment of Environmental Impact

Example: Clothes Washer



Whirlpool's biggest opportunity to reduce environmental impact is by selling energy efficient appliances.

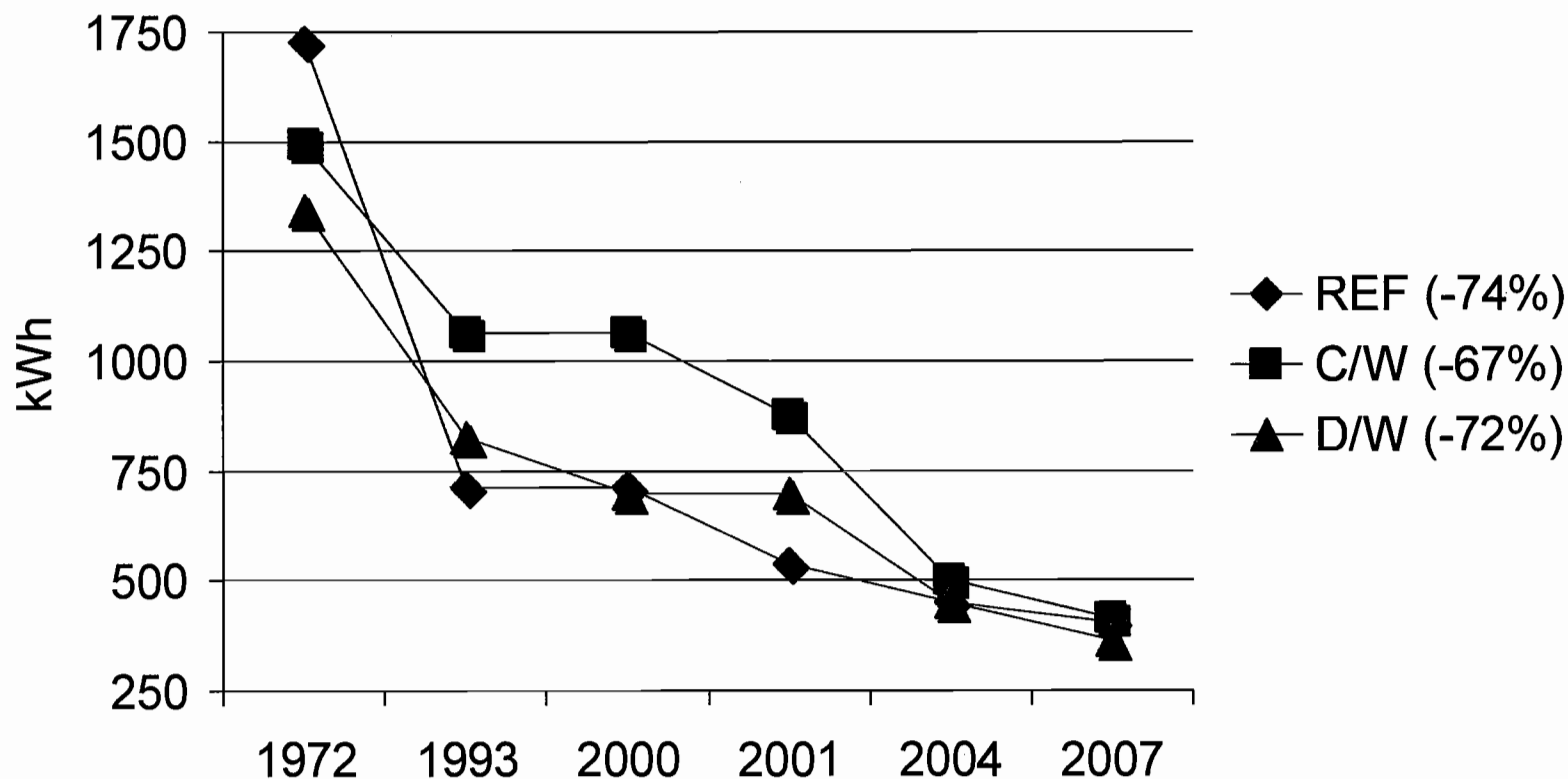
Source: © European Communities, 1995-2002



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## Home Appliance Energy Efficiency Has Improved by 70% since 1972

Annual Average KilowattHour Usage

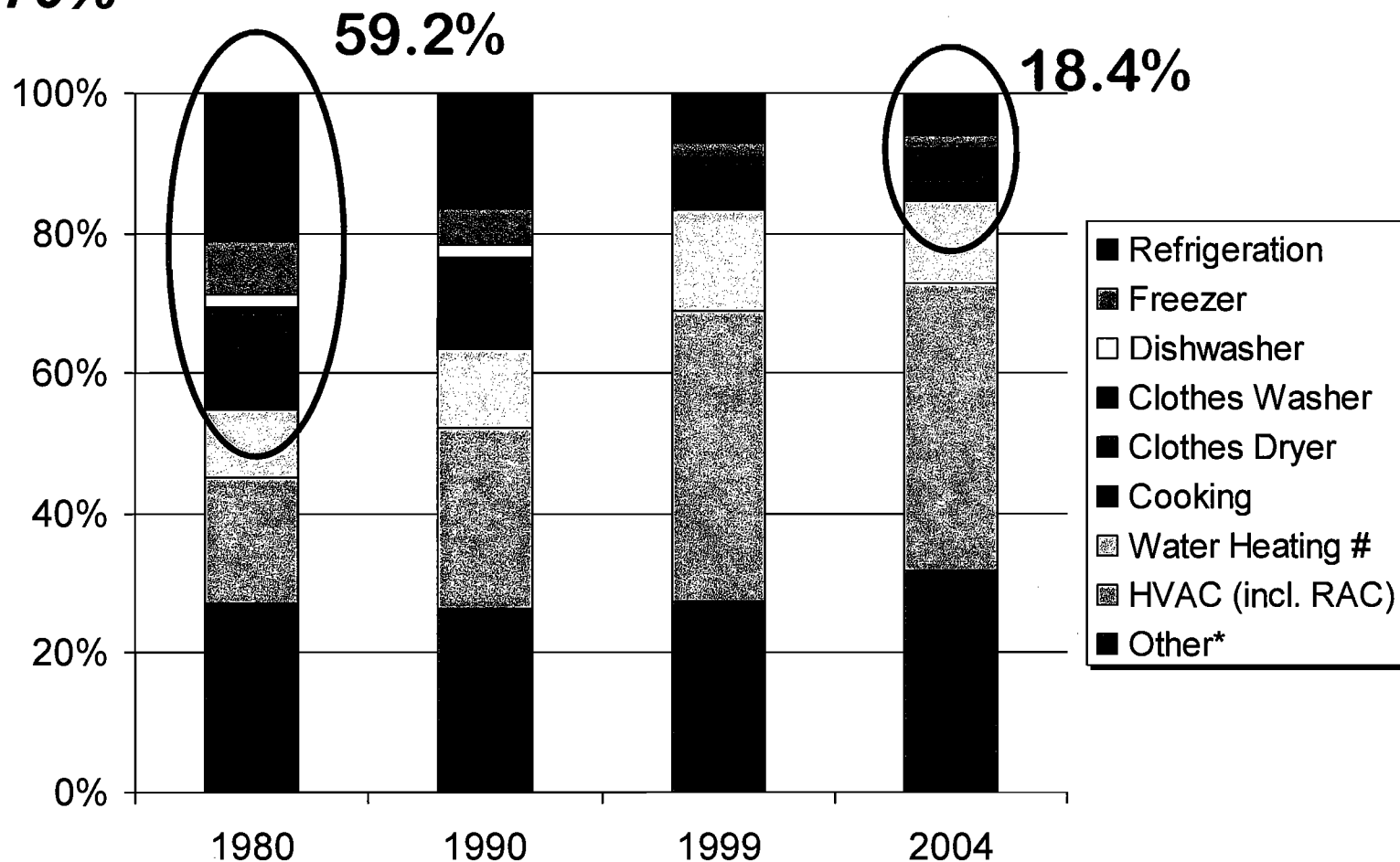






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## Relative Appliance Energy Consumption Has Dropped By 70%



Source: Energy Information  
Administration/Annual  
Energy Outlook 1997-2004  
Data consider saturation

\* Other: Includes electronic items not listed, such as small  
cooking appliances, electric tools, home electronics  
# 17% of Water Heating is for washers & dishwashers<sub>9</sub>



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## ***Environmental Management***

- ⌘ Since 1970, Whirlpool has maintained a formal global environmental management process designed to integrate environmental considerations into product design, employee training, monitoring operations, and manufacturing processes.
- ⌘ All Whirlpool plants must comply with the company's rigorous compliant audit process that assesses environmental risks and health and safety criteria.
- ⌘ Many of our global facilities are ISO14001 certified, and where they are not, we practice the standard.
- ⌘ These standards are applied globally, even in countries with existing laws that would allow us to perform at levels below our global standards.





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## ***Whirlpool Amana Division is Leading the Way***

### **⌘ 2005 – STEAM BOILERS**

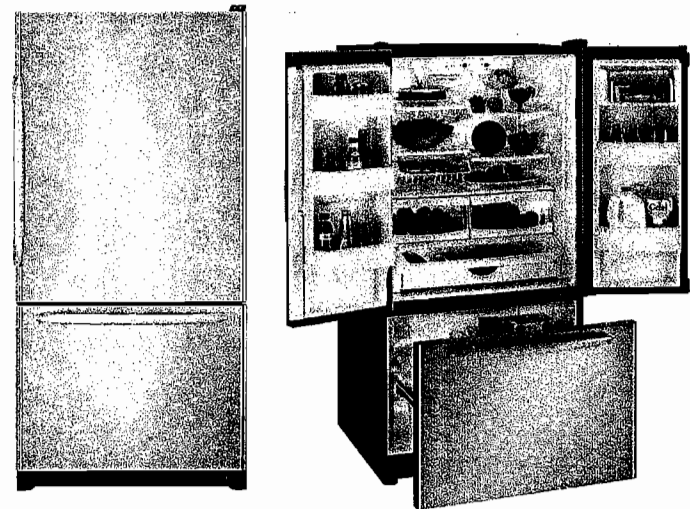
Replaced 2 large capacity boilers with 4 HE units and improved distribution system  
46.7k mmBTU annual reduction in natural gas usage

### **⌘ 2007 – COMPRESSED AIR**

Centralized controls and compressor tie-in  
Estimated annual reduction of 3,350,000 KWH

### **⌘ 2008 – FACILITY LIGHTING**

Corporate Energy Efficiency Initiative  
Project in Scoping





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## ***Amana Division: A leader in energy efficiency***

⌘ 2006 Amana-produced refrigerators reduced energy usage by nearly 591 million kWh/year.

- That's enough energy to power all Iowa homes for nearly 17 days.
- Eliminated carbon emissions equivalent to those generated by 61,349 passenger cars in a year.

⌘ 92 percent of units produced in Amana in 2006 were ENERGY STAR qualified.

⌘ Energy Star qualified refrigerators use 15% less energy than the federal standard. As of April 2008, they will use 20% less energy.

### Assumptions:

Amana ENERGY STAR units sold in 2006 replaced refrigerators with the average U.S. unit energy consumption for refrigeration in 2001 of 1,239 kWh (Source: US Department of Energy, Energy Information Office).

Average Iowa home uses 11,256 kWh/year (Source: US Department of Energy, Energy Information Office)

Electricity Carbon Factors (Source: EPA 2003)



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## **ENERGY STAR®**

⌘ ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.



⌘ ENERGY STAR appliances meet strict energy efficiency guidelines.

⌘ Many households could save 20 to 30 percent on energy bills by using ENERGY STAR products and energy efficient solutions.

⌘ Whirlpool is the only two-time appliance manufacturer winner of the ENERGY STAR Partner of the Year Sustained Excellence Award



### **Won 2007 Sustained Excellence Award**

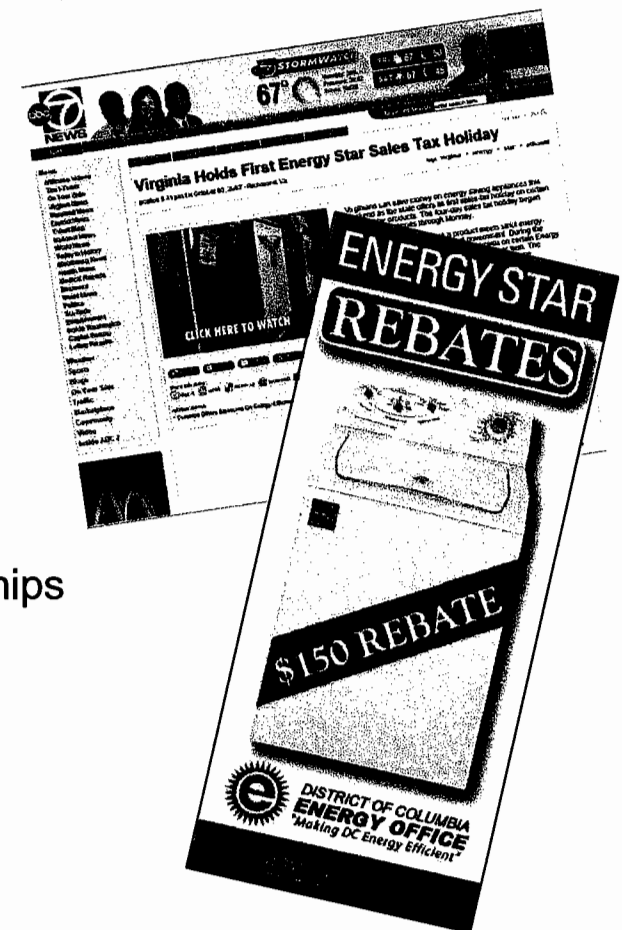
Given to organizations that have exhibited outstanding environmental leadership year after year, while sustaining product and marketing excellence, Whirlpool was the inaugural recipient.



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## What will make a difference?

- ⌘ Incentives for getting “energy hog” appliances off the grid (i.e. not putting the old fridge in the garage or basement)
- ⌘ Promoting the purchase of new ENERGY STAR qualified appliances
- ⌘ Examples of what states are doing
  - ⌘ Maryland
    - ⌘ ENERGY STAR sales tax exemption 2000-2004
  - ⌘ Oregon
    - ⌘ Income tax credit of up to \$180 per super-efficient appliance
  - ⌘ District of Columbia Government
    - ⌘ Rebate of up to \$150 for ENERGY STAR qualified appliances
  - ⌘ Georgia, Florida, Virginia
    - ⌘ Sales tax holidays for ENERGY STAR appliances
- ⌘ Whirlpool has Energy Star coop marketing relationships in New York and Wisconsin, and we are developing relationships in Oregon and Ohio.





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## Iowa Energy Efficiency Legislation

⌘ Whirlpool supports legislation that would provide a long-term sales tax exemption for clothes washers, refrigerators and dishwashers.

- ⌘ Provides meaningful savings in not only energy, but also water. Savings are significant over the lifetime of the products (10-18 years)
- ⌘ Provides consumer with instant savings with no paperwork (i.e. more effective than mail-in rebates or income tax credits)
- ⌘ Long term exemption is preferable to short term sales tax holiday
  - ⌘ Encourages quick market transformation and energy efficiency awareness.
  - ⌘ Timing of appliance purchases often not amenable to short-term incentives (e.g. appliance break-down, home renovation)

### Senate File 122

PAG LIN

1 1 Section 1. Section 423.3, Code 2007, is amended by adding  
1 2 the following new subsection:  
1 3 **NEW SUBSECTION.** 92. The sales price from the sale of a  
1 4 clothes washing machine, refrigerator, or dishwasher which  
1 5 meets or exceeds the energy efficiency rating for the  
1 6 applicable appliance under the energy star program establish  
1 7 by the United States environmental protection agency in  
1 8 cooperation with the United States department of energy.  
1 9 Sec. 2. **INFORMATION TO PUBLIC.** The department of revenue  
1 10 in consultation with manufacturers and retailers, and publi  
1 11 interest groups, shall develop public information programs  
1 12 materials to identify and encourage the sales of products  
1 13 eligible for the tax exemption provided under section 1 of  
1 14 this Act.  
1 15 Sec. 3. **EFFECTIVE DATE.** This Act takes effect January  
1 16 2008.  
1 17 **EXPLANATION**  
1 18 This bill exempts from sales and use taxes the purchas  
1 19 clothes washers, refrigerators, and dishwashers that mee  
1 20 energy efficiency standards set under the federal energy  
1 21 program. This program was established through the coope  
1 22 of the United States department of energy and the Unite  
1 23 States environmental protection agency.  
1 24 The bill takes effect January 1, 2008.  
1 25 LSB 2314SS 82  
1 26 mg:rj/je/5



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## Partnerships are key to success

⌘ Whirlpool works closely with government officials, environmental awareness organizations, utilities and retailers to promote energy efficiency.

⌘ Working together, we can maximize resource efficiency by educating consumers and providing incentives for purchasing energy- and water-efficient appliances.

Whirlpool's Resource Innovations Newsletter and National Energy Efficiency Incentives Database Keep Stakeholders Informed

Resource Innovations from



ENERGY STAR AWARD 2007 SUSTAINED EXCELLENCE

August 2007

Did You Know. ...

According to the EPA, a recent government survey showed that at least 36 states are anticipating local, regional, or statewide water shortages by 2013?

Through its Resource Innovations newsletter, Whirlpool Corporation strives to assist utilities and energy services professionals to inform consumers about resource efficient and ENERGY STAR qualified appliances. Whirlpool Corporation's branded appliances are designed around the consumer, with resource and energy management in mind.

Note: Some locations are served by multiple organizations. Consumers should confirm eligibility through their utilities. Cities are included when information is available.

2007 ENERGY EFFICIENCY INCENTIVES  
Fabric Care - National (Excluding CA)  
Data is continuously updated.

Production starting August 29, 2007 and running through September 2007. Incentives apply to ENERGY STAR qualified appliances, which may include the purchase of a new ENERGY STAR qualified clothes washer.

Organization	Start Date	End Date	Incentive Amount	Energy Star Rating	Other
Salmon River Electric	1/2/2007	12/31/2007	\$154 - \$241	Energy Star qualified	
City of Soda Springs	1/1/2007	12/31/2007	\$100	Energy Star qualified	
United Electric Cooperative, Inc.	1/1/2007	12/31/2007	\$50	Energy Star qualified	
Vectra Energy Delivery	1/1/2007	12/31/2007	\$100	Energy Star qualified	
Alliant Energy (IA)	1/1/2007	12/31/2007	\$50 - \$100	Energy Star qualified	
Indiana Municipal Utilities	1/1/2007	12/31/2007	\$100	Energy Star qualified	
Muscatine Power and Water	1/1/2007	12/31/2007	\$50	Energy Star qualified	
Waverly Light and Power	1/1/2007	12/31/2007	\$150	Energy Star qualified	
Cape Light Compact	01/01/2007	11/30/2007	\$75	Energy Star qualified	
Marietta Municipal Electric Department	1/1/2003	12/31/2008	\$100	Energy Star qualified	





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## ***Conclusion***

⌘ Promoting energy and water efficiency is the quickest, cheapest, cleanest and most effective way of solving our nation's energy and water shortages.

⌘ Whirlpool appreciates the work of the Energy Efficiency Study Committee and looks forward to an ongoing dialogue about how to promote energy and water efficiency in the state of Iowa.

Our greatest national energy resource is the energy we currently waste.

-Former Energy Secretary Spence Abraham



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Whirlpool Energy [www.whirlpool.com/energy](http://www.whirlpool.com/energy)

ENERGY STAR [www.energystar.gov](http://www.energystar.gov)

Pew Center [www.pewcenter.org](http://www.pewcenter.org)

EPA Smartway Program [www.epa.gov/smartway](http://www.epa.gov/smartway)